To fully match the OPE of the current operators, we need an *Einstein-Maxwell-Weyl-scalar* theory

$$\mathcal{S}_{\text{bulk}} = \frac{1}{g_M^2} \int d^4x \sqrt{g} \left[\frac{1}{4} \left[1 + \alpha\, \varphi(x)\right] F_{ab} F^{ab} + \gamma L^2 C_{abcd} F^{ab} F^{cd} \right] + \int d^4x \sqrt{g} \left[-\frac{1}{2\kappa^2} \left(R + \frac{6}{L^2} \right) + g^{ab} \partial_a \varphi \partial_b \varphi + m^2 \varphi^2 \right],$$

where C_{abcd} is the Weyl tensor. Stability constraints on this action restrict $|\gamma| < 1/12$, in agreement with results from the CFT3. The scalar field φ is conjugate to the CFT operator $\mathcal{O}$ with scaling dimension $3 - 1/\nu$, which fixes its mass m. The coupling α is determined by the OPE of the currents with $\mathcal{O}$.